

## WEST Search History

DATE: Tuesday, September 14, 2004

Hide?	Set Name	Query	Hit Count
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L6	TSP1 same peptide	27
<input type="checkbox"/>	L5	KRUTZSCH-HENRY.in.	7
<input type="checkbox"/>	L4	L3 and tsp1	0
<input type="checkbox"/>	L3	ROBERTS-DAVID.in.	66
		<i>DB=USPT; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>	
<input type="checkbox"/>	L2	5789184.pn.	1
<input type="checkbox"/>	L1	5770563.pn.	1

END OF SEARCH HISTORY

us-10-030-735-53.rag

GenCore version 5.1.6

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OM protein - protein search, using sw model

Run on: April 7, 2004, 18:56:40 ; Search time 24.7731 Seconds  
(without alignments)  
45.622 Million cell updates  
/sec

Title: US-10-030-735-53  
Perfect score: 20  
Sequence: 1 QVRF 4

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 150 summaries

Database : A\_Geneseq\_29Jan04:\*  
1: geneseqp1980s:\*  
2: geneseqp1990s:\*  
3: geneseqp2000s:\*  
4: geneseqp2001s:\*  
5: geneseqp2002s:\*  
6: geneseqp2003as:\*  
7: geneseqp2003bs:\*  
8: geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being pri  
nted,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result            %  
                 Query

## us-10-030-735-53.rag

No.	Score	Match	Length	DB	ID	Description
-----						
1	20	100.0	7	4	AAU03306	Aau03306 Fr
uit fly						
2	20	100.0	7	7	ADE14636	Ade14636 Dm
GPCR bi						
3	20	100.0	9	2	AAW72575	Aaw72575 Gl
ycosami						
4	20	100.0	9	5	ABJ04513	Abj04513 HU
VEC cel						
5	20	100.0	11	2	AAW69636	Aaw69636 Pe
ptide S						
6	20	100.0	11	2	AAW74433	Aaw74433 St
e2 agon						
7	20	100.0	11	3	AAV93629	Aay93629 Pe
ptide e						
8	20	100.0	11	3	AAB20743	Aab20743 MF
-alpha-						
9	20	100.0	11	4	AAG79161	Aag79161 Am
ino aci						
10	20	100.0	11	4	AAB84509	Aab84509 Am
ino aci						
11	20	100.0	11	6	ABU10263	Abu10263 Al
pha-fac						
12	20	100.0	12	4	AAB35379	Aab35379 Al
pha3bet						
13	20	100.0	12	5	AAU96875	Aau96875 Hu
man pro						
14	20	100.0	12	6	ABP76487	Abp76487 Pe
ptidomi						
15	20	100.0	15	5	ABG72342	Abg72342 Hu
man pro						
16	20	100.0	33	4	AAM17702	Aam17702 Pe
ptide #						
17	20	100.0	33	4	ABB36725	Abb36725 Pe
ptide #						
18	20	100.0	33	4	AAM30216	Aam30216 Pe
ptide #						
19	20	100.0	33	4	ABB31514	Abb31514 Pe
ptide #						
20	20	100.0	33	4	AAM05364	Aam05364 Pe
ptide #						
21	20	100.0	36	2	AAV42735	Aay42735 Hu
man alp						
22	20	100.0	44	6	ABP80500	Abp80500 N.
gonorr						
23	20	100.0	44	6	ABP77440	Abp77440 N.

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gonorr							
24	20	100.0	48	3	AAB28082	Aab28082	Hu
man sec							
25	20	100.0	50	4	ABG21213	Abg21213	No
vel hum							
26	20	100.0	50	6	ABM65035	Abm65035	Pr
opionib							
27	20	100.0	53	4	AAU66685	Aau66685	Pr
opionib							
28	20	100.0	53	4	AAU47836	Aau47836	Pr
opionib							
29	20	100.0	53	6	ABM44355	Abm44355	Pr
opionib							
30	20	100.0	53	6	ABM63204	Abm63204	Pr
opionib							
31	20	100.0	54	3	AAB23638	Aab23638	Hu
man sec							
32	20	100.0	54	5	ABP08778	Abp08778	Hu
man ORF							
33	20	100.0	55	5	ABP06395	Abp06395	Hu
man ORF							
34	20	100.0	56	4	AAU39161	Aau39161	Pr
opionib							
35	20	100.0	56	5	ABP01166	Abp01166	Hu
man ORF							
36	20	100.0	56	6	ABM35680	Abm35680	Pr
opionib							
37	20	100.0	57	5	ABP33289	Abp33289	Hu
man ORF							
38	20	100.0	58	4	AAM19377	Aam19377	Pe
ptide #							
39	20	100.0	58	4	ABB38762	Abb38762	Pe
ptide #							
40	20	100.0	58	4	AAM32235	Aam32235	Pe
ptide #							
41	20	100.0	58	4	ABB23805	Abb23805	Pr
otein #							
42	20	100.0	58	4	AAM71956	Aam71956	Hu
man bon							
43	20	100.0	58	4	AAM59401	Aam59401	Hu
man bra							
44	20	100.0	58	4	ABG53640	Abg53640	Hu
man liv							
45	20	100.0	58	5	ABG41771	Abg41771	Hu
man pep							
46	20	100.0	64	7	ADC95207	Adc95207	E.
faeciu							
47	20	100.0	69	4	ABB15694	Abb15694	Hu

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man ner						
48	20	100.0	69	5	ABP05088	Abp05088 Hu
man ORF						
49	20	100.0	72	4	AAU61842	Aau61842 Pr
opionib						
50	20	100.0	72	6	ABM58361	Abm58361 Pr
opionib						
51	20	100.0	73	5	ABP03846	Abp03846 Hu
man ORF						
52	20	100.0	75	3	AAG18731	Aag18731 Ze
a mays						
53	20	100.0	78	2	AAU00185	Aay00185 En
terococ						
54	20	100.0	78	5	ABP43404	Abp43404 E
faecali						
55	20	100.0	78	6	ABU88432	Abu88432 E.
faecal						
56	20	100.0	78	6	ABU13683	Abu13683 En
terococ						
57	20	100.0	81	5	ABG72341	Abg72341 Hu
man pro						
58	20	100.0	82	4	AAB63599	Aab63599 Hu
man gas						
59	20	100.0	82	5	ABP35151	Abp35151 Hu
man tra						
60	20	100.0	82	6	ABP79077	Abp79077 N.
gonorr						
61	20	100.0	87	4	AAU48135	Aau48135 Pr
opionib						
62	20	100.0	87	6	ABM44654	Abm44654 Pr
opionib						
63	20	100.0	90	3	AAB32959	Aab32959 Pi
nus rad						
64	20	100.0	91	4	AAM88645	Aam88645 Hu
man imm						
65	20	100.0	91	4	AAU61765	Aau61765 Pr
opionib						
66	20	100.0	91	6	ABM58284	Abm58284 Pr
opionib						
67	20	100.0	92	3	AAB57215	Aab57215 Hu
man pro						
68	20	100.0	92	7	ADB99960	Adb99960 En
terohae						
69	20	100.0	93	4	ABG10986	Abg10986 No
vel hum						
70	20	100.0	95	5	ABP09683	Abp09683 Hu
man ORF						
71	20	100.0	100	3	AAU95699	Aay95699 Co

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smid cH						
72	20	100.0	101	3	AAG22872	Aag22872 Ar
abidops						
73	20	100.0	101	4	AAM06501	Aam06501 Hu
man foe						
74	20	100.0	101	5	ABB49947	Abb49947 Li
steria						
75	20	100.0	102	3	AAG22871	Aag22871 Ar
abidops						
76	20	100.0	102	5	ABB48631	Abb48631 Li
steria						
77	20	100.0	102	6	ABP79162	Abp79162 N.
gonorr						
78	20	100.0	105	2	AAY00184	Aay00184 En
terococ						
79	20	100.0	105	5	ABP43403	Abp43403 E
faecali						
80	20	100.0	105	6	ABU88431	Abu88431 E.
faecal						
81	20	100.0	105	6	ABU13682	Abu13682 En
terococ						
82	20	100.0	111	5	ABP33493	Abp33493 Hu
man ORF						
83	20	100.0	115	7	ADC95439	Adc95439 E.
faeciu						
84	20	100.0	120	4	AAM82492	Aam82492 Hu
man imm						
85	20	100.0	120	7	ADB65146	Adb65146 Hu
man pro						
86	20	100.0	121	4	AAO01145	Aao01145 Hu
man pol						
87	20	100.0	122	3	AAG43679	Aag43679 Ar
abidops						
88	20	100.0	122	3	AAG08770	Aag08770 Ar
abidops						
89	20	100.0	124	4	ABG02989	Abg02989 No
vel hum						
90	20	100.0	125	3	AAG08769	Aag08769 Ar
abidops						
91	20	100.0	125	3	AAG43678	Aag43678 Ar
abidops						
92	20	100.0	126	3	AAG37071	Aag37071 Ar
abidops						
93	20	100.0	128	4	ABB17813	Abb17813 Hu
man ner						
94	20	100.0	129	4	AAB79154	Aab79154 Co
rynebac						
95	20	100.0	131	6	ABP72618	Abp72618 Sn

owdrop							
96	20	100.0	132	1	AAP70411	Aap70411	OR
F 8 gen							
97	20	100.0	132	3	AAG22870	Aag22870	Ar
abidops							
98	20	100.0	133	3	AAG18737	Aag18737	Ze
a mays							
99	20	100.0	133	4	ABG16090	Abg16090	No
vel hum							
100	20	100.0	135	4	AAO01000	Aao01000	Hu
man pol							
101	20	100.0	135	6	ADA34622	Ada34622	Ac
inetoba							
102	20	100.0	138	4	ABG22359	Abg22359	No
vel hum							
103	20	100.0	142	5	ABG70554	Abg70554	A.
oryzae							
104	20	100.0	142	5	ABG70552	Abg70552	A.
oryzae							
105	20	100.0	143	5	ABP32659	Abp32659	Hu
man hel							
106	20	100.0	144	4	AAU40695	Aau40695	Pr
opionib							
107	20	100.0	144	6	ABM37214	Abm37214	Pr
opionib							
108	20	100.0	150	7	ADC89121	Adc89121	Ri
bosomal							
109	20	100.0	150	7	ADC89101	Adc89101	Ri
bosomal							
110	20	100.0	150	7	ADC89112	Adc89112	Ri
bosomal							
111	20	100.0	150	7	ADC89125	Adc89125	Ri
bosomal							
112	20	100.0	150	7	ADC89113	Adc89113	Ri
bosomal							
113	20	100.0	150	7	ADC89108	Adc89108	Ri
bosomal							
114	20	100.0	151	4	ABB68111	Abb68111	Dr
osophil							
115	20	100.0	151	4	AAU28021	Aau28021	No
vel hum							
116	20	100.0	151	6	ABR64246	Abr64246	An
giogene							
117	20	100.0	151	7	ADC89100	Adc89100	Ri
bosomal							
118	20	100.0	153	3	AAB44136	Aab44136	Hu
man can							
119	20	100.0	154	4	ABG00143	Abg00143	No

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vel hum						
120	20	100.0	157	3	AAG19952	Aag19952 Ar
abidops						
121	20	100.0	157	3	AAG48125	Aag48125 Ar
abidops						
122	20	100.0	157	3	AAG23291	Aag23291 Ar
abidops						
123	20	100.0	158	4	ABG02986	Abg02986 No
vel hum						
124	20	100.0	162	2	AAy60114	Aay60114 Hu
man end						
125	20	100.0	162	7	ADC33053	Adc33053 Hu
man nov						
126	20	100.0	163	4	AAU55378	Aau55378 Pr
opionib						
127	20	100.0	163	6	ABM51897	Abm51897 Pr
opionib						
128	20	100.0	165	4	AAU19364	Aau19364 Hu
man G p						
129	20	100.0	166	4	AAU17657	Aau17657 No
vel sig						
130	20	100.0	166	7	ADB94365	Adb94365 Hu
man nov						
131	20	100.0	167	3	AAy75563	Aay75563 Ne
isseria						
132	20	100.0	167	3	AAy75562	Aay75562 Ne
isseria						
133	20	100.0	167	5	ABU05887	Abu05887 M.
tuberc						
134	20	100.0	167	6	ABP57498	Abp57498 My
cobacte						
135	20	100.0	167	6	ABU54889	Abu54889 Me
tabolic						
136	20	100.0	169	3	AAy74781	Aay74781 Ne
isseria						
137	20	100.0	171	4	AAB92451	Aab92451 Hu
man pro						
138	20	100.0	173	3	AAB15952	Aab15952 E.
coli p						
139	20	100.0	173	6	ABU28383	Abu28383 Pr
otein e						
140	20	100.0	173	6	ABU14714	Abu14714 Pr
otein e						
141	20	100.0	174	5	ABB48326	Abb48326 Li
steria						
142	20	100.0	175	6	ADA20733	Ada20733 Co
rn cyto						
143	20	100.0	176	6	ABJ18773	Abj18773 Ps



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eudomon							
144	20	100.0	179	4	AAU49875	Aau49875	Pr
opionib							
145	20	100.0	179	6	ABM46394	Abm46394	Pr
opionib							
146	20	100.0	182	3	AAB58821	Aab58821	Br
east an							
147	20	100.0	186	3	AAG04032	Aag04032	Hu
man sec							
148	20	100.0	186	3	AAG24340	Aag24340	Ar
abidops							
149	20	100.0	187	7	ADC31395	Adc31395	Hu
man nov							
150	20	100.0	191	4	AAE13835	Aae13835	Hu
man lun							

#### ALIGNMENTS

#### RESULT 1

AAU03306

ID AAU03306 standard; peptide; 7 AA.

XX

AC AAU03306;

XX

DT 12-SEP-2001 (first entry)

XX

DE Fruit fly G protein coupled receptors, DmGPCR6aL/bL ligand #55.

XX

KW Fruit fly; G protein coupled receptor; DmGPCR6aL/bL;

KW human immunodeficiency virus; HIV; cancer; Parkinson's disease; diabetes;

KW obesity; atherosclerosis; thrombosis; stroke; renal failure;

KW inflammation; rheumatoid arthritis; autoimmune disorder;

KW neurological disorder; schizophrenia; manic depression; dementia;

KW severe mental retardation; dyskinesia; Huntington's disease;

KW Tourette's syndrome; ligand.

XX

OS Drosophila melanogaster.

XX

FH Key Location/Qualifiers

FT Modified-site 7

FT /note= "C-terminus is amidated"

XX

PN WO200131005-A2.

XX

PD 03-MAY-2001.

XX  
PF 20-OCT-2000; 2000WO-US029002.  
XX  
PR 22-OCT-1999; 99US-00425676.  
XX  
PA (PHAA ) PHARMACIA & UPJOHN CO.  
XX  
PI Lowery DE, Smith VG, Kubiak TA, Larsen MJ;  
XX  
DR WPI; 2001-316333/33.  
XX  
PT New Drosophila melanogaster GPCR nucleic acids and polypeptide useful for  
PT inducing an immune response, for identifying homologs and for treating  
PT e.g. diabetes, obesity and manic depression.  
XX  
PS Example 9; Page 100; 110pp; English.  
XX  
CC The sequence is a fruit fly G protein coupled receptors, DmGPCR6a L/bL,  
CC peptide ligand. The proteins are useful for inducing an immune response  
CC against itself in a mammal. The nucleic acids are useful for identifying  
CC an animal homolog of DmGPCR, by screening databases or libraries.  
The  
CC compounds identified as binding partners or modulators of GPCR binding  
CC are useful for treating diseases in animals, and for control insects that  
CC are harmful or cause injury to plants or animals. Diseases treated  
CC include infections (e.g. viral and human immunodeficiency virus, HIV),  
CC cancer, pain, Parkinson's disease, hypotension, hypertension, diabetes,  
CC obesity, atherosclerosis, thrombosis, stroke, renal failure,  
CC inflammation, rheumatoid arthritis, autoimmune disorders, and psychotic  
CC and neurological disorders (anxiety, schizophrenia, manic depression,  
CC delirium, dementia, severe mental retardation, dyskinesias, Huntington's  
CC disease or Tourette's syndrome). The nucleic acids can be used for  
CC genetic mapping, and producing the GPCRs. Anti-GPCR antibodies can be

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CC used in therapy, diagnostic assays and for modulating GPCR activity  
XX  
SQ Sequence 7 AA;

Query Match 100.0%; Score 20; DB 4; Length 7;  
Best Local Similarity 100.0%; Pred. No. 1.4e+06;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4  
    ||||  
Db 4 QVRF 7

RESULT 2

ADE14636

ID ADE14636 standard; peptide; 7 AA.

XX

AC ADE14636;

XX

DT 29-JAN-2004 (first entry)

XX

DE DmGPCR binding ligand #90.

XX

KW fruit fly; G-protein coupled receptor; DmGPCR; insect population control;

KW fly; tick; mite; flea; cockroach; ectoparasite; binding ligand.

XX

OS Drosophila melanogaster.

XX

PN US2003180297-A1.

XX

PD 25-SEP-2003.

XX

PF 06-AUG-2002; 2002US-00213821.

XX

PR 22-OCT-1999; 99US-00425676.

PR 20-OCT-2000; 2000US-00693746.

XX

PA (LOWE/) LOWERY D E.

PA (SMIT/) SMITH V G.

PA (KUBI/) KUBIAK T M.

PA (LARS/) LARSEN M J.

XX

PI Lowery DE, Smith VG, Kubiak TM, Larsen MJ;

XX

DR WPI; 2003-843918/78.

XX  
PT Binding a Drosophila melanogaster G-protein coupled receptor with  
a  
PT binding partner or modulator is useful to control an insect popul  
ation or  
PT to treat or prevent a disease or condition caused by ectoparasite  
s.  
XX  
PS Example 9; SEQ ID NO 114; 53pp; English.  
XX  
CC The invention relates to a method of binding a Drosophila melanog  
aster G-  
CC protein coupled receptor (DmGPCR) with a DmGPCR binding partner.  
The  
CC invention is used to control an insect population, particularly a  
fly,  
CC fruit fly, tick, mite, flea or cockroach population, or to treat  
or  
CC prevent a disease or condition caused by ectoparasites, particula  
rly in a  
CC companion animal, livestock, horse or a human. The present sequen  
ce  
CC represents the amino acid sequence of a Drosophila melanogaster G  
-protein  
CC coupled receptor, DmGPCR binding ligand.  
XX  
SQ Sequence 7 AA;

Query Match 100.0%; Score 20; DB 7; Length 7;  
Best Local Similarity 100.0%; Pred. No. 1.4e+06;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; G  
aps 0;

Qy 1 QVRF 4  
||||  
Db 4 QVRF 7

RESULT 3

AAW72575

ID AAW72575 standard; peptide; 9 AA.

XX

AC AAW72575;

XX

DT 06-JAN-1999 (first entry)

XX

DE Glycosaminoglycan sulphate group transferase peptide #2.

XX

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KW Glycosaminoglycan sulphate group transferase; chinese hamster;  
KW L-iduronic acid residue; sulphate group receptor glycosaminoglycan;  
KW heparan sulphate 2-O-sulphate group transferase; HS2ST.  
XX  
OS Homo sapiens.  
OS Cricetulus sp.  
XX  
PN JP10257896-A.  
XX  
PD 29-SEP-1998.  
XX  
PF 04-JUN-1997; 97JP-00146815.  
XX  
PR 17-JAN-1997; 97JP-00006522.  
XX  
PA (SE GK ) SEIKAGAKU KOGYO CO LTD.  
XX  
DR WPI; 1998-575907/49.  
XX  
PT A polynucleotide encoding glycosaminoglycan sulphate group transferase -  
PT useful for the recombinant production of the enzyme.  
XX  
PS Example 1; Page 10; 22pp; Japanese.  
XX  
CC The present sequence represent a peptide of glycosaminoglycan sulphate  
CC group transferase, from an example of the present invention. The present  
CC invention describes a DNA molecule coding at least part of a polypeptide  
CC of glycosaminoglycan sulphate group transferase having the 356 amino acid  
CC sequence as shown in AAW72571 to AAW72573, and optionally having a  
CC replacement, deletion, or insertion of at least one amino acid (a  
a)  
CC residue but still retaining the enzymic activity of transferring a  
a  
CC sulphate group from a sulphate group donor to the 2-OH of a L-iduronic  
ronic  
CC acid residue contained in a sulphate group receptor glycosaminoglycan.  
CC The nucleic acid can be used for the recombinant production of the  
e  
CC enzyme, especially for the production of heparan sulphate 2-O-sulphate  
phate

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CC group transferase (HS2ST)

XX

SQ Sequence 9 AA;

Query Match 100.0%; Score 20; DB 2; Length 9;

Best Local Similarity 100.0%; Pred. No. 1.4e+06;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 2 QVRF 5

RESULT 4

ABJ04513

ID ABJ04513 standard; peptide; 9 AA.

XX

AC ABJ04513;

XX

DT 24-OCT-2002 (first entry)

XX

DE HUVEC cell targeting CX7C targeting peptide 27.

XX

KW BRASIL; targeting peptide; bacterial infection;

KW Biopanning and Rapid Analysis of Selective Interactive Ligands; diabetes;

KW inflammatory arthritis; atherosclerosis; cancer; autoimmune disease;

KW viral infection; cardiovascular disease; degenerative disease.

XX

OS Unidentified.

XX

PN WO200220822-A2.

XX

PD 14-MAR-2002.

XX

PF 07-SEP-2001; 2001WO-US028124.

XX

PR 08-SEP-2000; 2000US-0231266P.

PR 17-JAN-2001; 2001US-00765101.

XX

PA (TEXA ) UNIV TEXAS SYSTEM.

XX

PI Arap W, Pasqualini R;

XX

DR WPI; 2002-404697/43.

XX

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PT Identification of targeting peptides that can be used to treat diseases.

PT e.g. cancer and arthritis, by the BRASIL (Biopanning and Rapid Analysis

PT of Selective Ligands) method comprises a single differential

PT centrifugation step.

XX

PS Example 2; Page 66; 167pp; English.

XX

CC The invention comprises a method (BRASIL - Biopanning and Rapid Analysis

CC of Selective Interactive Ligands) to obtain a targeting peptide.

The

CC BRASIL method of the invention involves: exposing a target to a phage

CC display library in a first phase; exposing the first phase to a second

CC phase; and separating the phage bound to the target from unbound phage.

CC The BRASIL method of the invention allows cell phages to be separated

CC from the remaining unbound phage in a single differential centrifugation

CC step. When compared to conventional cell panning methods, the BRASIL

CC method shows a significant increase in recovery of specific phage and a

CC substantial decrease in background. The BRASIL method is useful for

CC identifying targeting peptides. The targeting peptides identified by the

CC method of the invention are useful for treating disease states, such as:

CC diabetes; inflammatory arthritis; atherosclerosis; cancer; autoimmune

CC disease; bacterial infection; viral infection; cardiovascular disease and

CC degenerative disease. The present amino acid sequence represents a

CC targeting peptide of the invention

XX

SQ Sequence 9 AA;

Query Match 100.0%; Score 20; DB 5; Length 9;

Best Local Similarity 100.0%; Pred. No. 1.4e+06;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4  
 ||||  
 Db 3 QVRF 6

## RESULT 5

AAW69636

ID AAW69636 standard; peptide; 11 AA.

XX

AC AAW69636;

XX

DT 19-OCT-1998' (first entry)

XX

DE Peptide SEQ ID NO:55 from US5789184 Example 5.

XX

KW Yeast; Saccharomyces cerevisiae; pheromone; alpha factor; recepto  
r;

KW surrogate; screening; selection.

XX

OS Synthetic.

XX

PN US5789184-A.

XX

PD 04-AUG-1998.

XX

PF 05-JUN-1995; 95US-00464531.

XX

PR 31-MAR-1993; 93US-00041431.

PR 31-JAN-1994; 94US-00190328.

PR 20-SEP-1994; 94US-00309313.

PR 13-OCT-1994; 94US-00322137.

XX

PA (CADU-) CADUS PHARM CORP.

XX

PI Manfredi J, Murphy AJ, Fowlkes DM, Trueheart J, Klein C, Pau  
l J;

PI Broach J;

XX

DR WPI; 1998-446076/38.

DR N-PSDB; AAV50007.

XX

PT Recombinant yeast cells - containing gene encoding yeast pheromon  
e system

PT protein surrogate and gene encoding peptide modulator.

XX

PS Example 5; Col 123; 93pp; English.

XX

CC The present invention describes a yeast cell having a pheromone s



ystem,

CC in which the cell comprises: (a) a first heterologous gene encoding a

CC heterologous surrogate of a yeast pheromone system protein, the surrogate

CC being a kinase and performing in the pheromone system of the yeast cell a

CC function naturally performed by the corresponding yeast pheromone system

CC protein; and (b) a second heterologous gene encoding a heterologous

CC peptide, where the heterologous peptide modulates the interaction of the

CC surrogate with the pheromone system in the yeast cell, and the modulation

CC is a selectable or screenable event. The yeast cells are used in assaying

CC a peptide for modulation of the activity of a non- yeast surrogate for a

CC pheromone system protein and determining by detecting a change in the

CC selectable or screenable event whether the pheromone signal pathway is

CC activated or inhibited by the interaction of the surrogate and the

CC peptide. The present sequence represents a peptide which is used in an

CC example of the present invention

XX

SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 2; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 90;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 4 QVRF 7

RESULT 6

AAW74433

ID AAW74433 standard; peptide; 11 AA.

XX

AC AAW74433;

XX

DT 20-MAR-2003 (revised)

DT 10-MAY-1999 (first entry)  
 XX  
 DE Ste2 agonist peptide sequence.  
 XX  
 KW Yeast pheromone; Ste2 agonist; cognate yeast pheromone system protein;  
 KW farnesyl transferase; anticancer therapy.  
 XX  
 OS Synthetic.  
 XX  
 PN US5876951-A.  
 XX  
 PD 02-MAR-1999.  
 XX  
 PF 05-JUN-1995; 95US-00461598.  
 XX  
 PR 31-MAR-1993; 93US-00041431.  
 PR 31-JAN-1994; 94US-00190328.  
 PR 20-SEP-1994; 94US-00309313.  
 PR 13-OCT-1994; 94US-00322137.  
 XX  
 PA (CADU-) CADUS PHARM CORP.  
 XX  
 PI Manfredi J, Murphy AJ, Fowlkes DM, Trueheart J, Klein C, Paul J;  
 PI Broach J;  
 XX  
 DR WPI; 1999-189631/16.  
 DR N-PSDB; AAX18223.  
 XX  
 PT Yeast cells having an engineered pheromone system - useful for  
 PT identifying drugs which can inhibit or activate pheromone system  
 protein,  
 PT e.g. to develop anti-cancer therapies.  
 XX  
 PS Example 5; Col 61; 93pp; English.  
 XX  
 CC This sequence represents an Ste2 agonist peptide sequence. The invention  
 CC relates to Yeast cells engineered to express an exogenous protein capable  
 CC of substituting for a yeast protein involved in the post-translational  
 CC modification, transport, recognition or signal transduction of a yeast  
 CC pheromone. The system can be used to identify drugs which inhibit  
 or  
 CC activate the ability of the surrogate to substitute for the cognate

us-10-030-735-53.rag

te yeast

CC pheromone system protein. Inhibitors of farnesyl transferase identified

CC can be used for anticancer therapies. (Updated on 20-MAR-2003 to correct

CC PF field.)

XX

SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 2; Length 11;

Best Local Similarity 100.0%; Pred. No. 90;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 4 QVRF 7

RESULT 7

AAAY93629

ID AAY93629 standard; peptide; 11 AA.

XX

AC AAY93629;

XX

DT 25-SEP-2000 (first entry)

XX

DE Peptide encoded by the insert of an a-factor variant.

XX

KW Surrogate ligand; formyl peptide receptor like-1 receptor;

KW FPRL-1 receptor; signal transduction; cellular receptor; a-factor

;

KW ABC transporter; ion channel.

XX

OS Synthetic.

XX

PN WO200031261-A2.

XX

PD 02-JUN-2000.

XX

PF 24-NOV-1999; 99WO-US027909.

XX

PR 25-NOV-1998; 98US-0109902P.

PR 30-NOV-1998; 98US-00201396.

XX

PA (CADU-) CADUS PHARM CORP.

XX

PI Klein CA, Murphy AJ, Paul J;

XX  
 DR WPI; 2000-400071/34.  
 XX  
 PT Recombinant cell used to identify modulators of heterologous formyl  
 PT peptide receptor like-1 (FPRL-1) receptor, comprising FPRL-1 receptor  
 PT expressed in the cell membrane, and a FPRL-1 receptor ligand agonist.  
 XX  
 PS Example 5; Page 88; 156pp; English.  
 XX  
 CC AAY93628-31 represent peptides encoded by the inserts of a-factor  
 CC variants identified from random peptide libraries. These variants have  
 CC utility as improved substrates of ABC transporters expressed in yeast.  
 CC The specification describes a method for screening and identifying  
 CC pharmaceutically effective compounds which specifically interact with and  
 CC modulate the activity of a cellular receptor or ion channel. The method  
 CC uses a cells which expresses a heterologous formyl peptide receptor or like-  
 CC 1 (FPRL-1) receptor in the cell membrane, so that extracellular signal  
 CC interaction with the receptors extracellular region modulates signal  
 CC transduction via the receptor. The cell is used in a method to screen and  
 CC identify pharmaceutically effective compounds which specifically interact  
 CC with and modulate the activity of a cellular receptor or ion channel,  
 CC especially the FPRL-1 receptor  
 XX  
 SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 3; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 90;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4  
 ||||  
 Db 4 QVRF 7

RESULT 8

AAB20743

ID AAB20743 standard; peptide; 11 AA.

XX

AC AAB20743;

XX

DT 21-DEC-2000 (first entry)

XX

DE MF-alpha-1 expression construct peptide SEQ ID NO:55.

XX

KW Yeast; pheromone; alpha-factor; transporter; pheromone receptor;

KW G alpha subunit; MF alpha 1; MFa1; STE2; STE3; C5a receptor; GPA1

;

KW G protein coupled receptor; mutagenesis; amplification; screening

;

KW hybrid; agonist; antagonist; signal transduction; detection;

KW identification.

XX

OS Saccharomyces cerevisiae.

OS Synthetic.

XX

PN US6100042-A.

XX

PD 08-AUG-2000.

XX

PF 13-OCT-1994; 94US-00322137.

XX

PR 31-MAR-1993; 93US-00041431.

PR 31-JAN-1994; 94US-00190328.

PR 20-SEP-1994; 94US-00309313.

XX

PA (CADU-) CADUS PHARM CORP.

XX

PI Fowlkes DM, Broach J, Klein C, Murphy AJ, Paul J, Trueheart J;

PI Manfredi J;

XX

DR WPI; 2000-531665/48.

XX

PT Mixture of recombinant yeast cells comprising a heterologous G protein

PT coupled receptor whose signal transduction activity is modulated by a

PT heterologous polypeptide which provides a detectable signal on

PT modulation.

XX

PS Example 5; Col 63; 95pp; English.

XX

CC The present invention describes recombinant yeast cell mixtures (I). Each

CC (I) has a heterologous G protein coupled receptor (GPCR) expressed in the

CC cell membrane such that signal transduction (ST) activity via GPCR is

CC modulated by interaction of extracellular region (ER) of GPCR with a

CC heterologous polypeptide (P) which interacts with ER of receptor.

CC Modulation of the ST activity by (P) provides a detectable signal. Also

CC described is a recombinant yeast cell (II) that has a cell membrane which

CC comprises a GPCR such that ST activity via GPCR is modulated by

CC interaction of an ER of GPCR with an extracellular signal, and a (P)

CC which is transported to a location allowing interaction with ER of GPCR.

CC (I) is used for identifying a modulator of (P) expressed by the yeast

CC cell which involves providing (I) which comprises heterologous GPCR and a

CC heterologous test polypeptide, allowing the cells within the mixture to

CC generate a detectable signal and then identifying the heterologous test

CC peptide as a modulator of the heterologous receptor protein expressed by

CC the yeast cell. The yeast cells may be used to identify drugs which

CC inhibit or activate, to a detectable degree, the ability of the surrogate

CC to substitute for the cognate yeast pheromone system proteins. The yeast

CC cell is also used to screen agonists and antagonists. The present

CC sequence is used in the exemplification of the present invention

XX

SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 3; Length 11;  
 Best Local Similarity 100.0%; Pred. No. 90;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4  
    ||||  
Db 4 QVRF 7

## RESULT 9

AAG79161

ID AAG79161 standard; peptide; 11 AA.

XX

AC AAG79161;

XX

DT 03-JAN-2002 (first entry)

XX

DE Amino acid sequence of an improved a-factor variant.

XX

KW Cellular receptor; ion channel; cellular activity; drug discovery  
;

KW orphan receptor ligand; a-factor; ABC transporter.

XX

OS Synthetic.

XX

PN US2001026926-A1.

XX

PD 04-OCT-2001.

XX

PF 21-DEC-2000; 2000US-00747774.

XX

PR 31-MAR-1993; 93US-00041431.

PR 31-JAN-1994; 94US-00190328.

PR 20-SEP-1994; 94US-00309313.

PR 13-OCT-1994; 94US-00322137.

PR 05-JUN-1995; 95US-00461383.

PR 05-JUN-1995; 95US-00461598.

PR 05-JUN-1995; 95US-00463181.

PR 05-JUN-1995; 95US-00464531.

PR 17-JAN-1996; 96US-00582333.

XX

PA (CADU-) CADUS PHARM CORP.

XX

PI Klein CA, Murphy AJ, Fowlkes DM, Broach J, Manfredi J, Paul  
J;

PI Trueheart J;

XX

DR WPI; 2001-615870/71.

DR N-PSDB; AAI65750.

XX

PT Identification of compounds modulating cellular receptor activity  
useful

us-10-030-735-53.rag

PT for identifying and screening for ligands for orphan receptors, comprises

PT using recombinant cells comprising both receptors and test polypeptide.

XX

PS Example 5; Page 33; 50pp; English.

XX

CC The specification describes an assay for screening and identifying

CC pharmaceutically effective compounds that specifically interact with and

CC modulate the activity of a cellular receptor or ion channel. The assay

CC uses a mixture of recombinant cells, each comprising a receptor protein

CC whose signal transduction activity is modulated by an interaction with an

CC extracellular signal, a recombinant gene encoding a potential receptor

CC polypeptide, and a reporter gene construct. The assay is useful for rapid

CC screening of large numbers of polypeptides to identify polypeptides

CC antagonizing or agonizing receptor activity, and to identify drugs for

CC modulating cellular activity. It is especially useful to identify ligands

CC for orphan receptors, especially ligands for orphan cell surface

CC receptors, which are useful in drug discovery. The present sequence

CC represents an improved a-factor variant, which is a better substrate for

CC ABC transporters. The variant was identified using the assay of the

CC invention

XX

SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 4; Length 11;

Best Local Similarity 100.0%; Pred. No. 90;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 4 QVRF 7



RESULT 10

AAB84509

ID AAB84509 standard; peptide; 11 AA.

XX

AC AAB84509;

XX

DT 05-SEP-2001 (first entry)

XX

DE Amino acid sequence of a pheromone analogue.

XX

KW G protein coupled receptor; GPCR; cellular receptor; ion channel;

KW surrogate ligand; orphan receptor; pheromone analogue.

XX

OS Synthetic.

XX

PN US6255059-B1.

XX

PD 03-JUL-2001.

XX

PF 17-JAN-1996; 96US-00582333.

XX

PR 31-MAR-1993; 93US-00041431.

PR 31-JAN-1994; 94US-00190328.

PR 20-SEP-1994; 94US-00309313.

PR 13-OCT-1994; 94US-00322137.

PR 05-JUN-1995; 95US-00463181.

XX

PA (CADU-) CADUS PHARM CORP.

XX

PI Klein CA, Murphy AJM, Fowlkes DM, Broach J, Manfredi J, Paul J;

PI Trueheart J;

XX

DR WPI; 2001-396979/42.

DR N-PSDB; AAH27820.

XX

PT Identifying a ligand for an orphan G protein coupled receptor comprises

PT using an recombinant yeast expression library.

XX

PS Example 5; Col 63; 128pp; English.

XX

CC The specification describes a method for identifying a ligand for an

CC orphan G protein coupled receptor (GPCR). The method comprises rapidly

CC screening large numbers of polypeptides in a yeast expression library to

us-10-030-735-53.rag

CC identify those polypeptides which induce or antagonise receptor  
CC bioactivity. The method is useful for screening and identifying  
CC pharmaceutically effective compounds that specifically interact with and  
CC modulate the activity of a cellular receptor or ion channel. The  
assay is  
CC particularly amenable for identifying surrogate ligands for orphan  
n  
CC receptors. The present sequence represents a pheromone analogue,  
CC identified using the method of the invention  
XX  
SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 4; Length 11;  
Best Local Similarity 100.0%; Pred. No. 90;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4  
| | | |  
Db 4 QVRF 7

RESULT 11

ABU10263

ID ABU10263 standard; peptide; 11 AA.

XX

AC ABU10263;

XX

DT 28-JUL-2003 (first entry)

XX

DE Alpha-factor analogue peptide #2 from random peptide library.

XX

KW Engineered yeast cell; yeast pheromone system surrogate;

KW surrogate modulator; yeast pheromone system protein surrogate; trait;

KW antifungal compound; antibiotic; alpha-factor pheromone; MFalpha1

.

XX

OS Synthetic.

XX

PN US2003008380-A1.

XX

PD 09-JAN-2003.

XX

PF 10-MAY-1999; 99US-00309196.

XX

PR 31-MAR-1993; 93US-00041431.

PR 31-JAN-1994; 94US-00190328.  
PR 20-SEP-1994; 94US-00309313.  
PR 13-OCT-1994; 94US-00322137.

XX

PA (FOWL/) FOWLKES D M.  
PA (BROA/) BROACH J.  
PA (MANF/) MANFREDI J.  
PA (KLEI/) KLEIN C.  
PA (MURP/) MURPHY A J.  
PA (PAUL/) PAUL J.  
PA (TRUE/) TRUEHEART J.

XX

PI Fowlkes DM, Broach J, Manfredi J, Klein C, Murphy AJ, Paul J  
;  
PI Trueheart J;

XX

DR WPI; 2003-416694/39.  
DR N-PSDB; ACA61842.

XX

PT New yeast cell having a pheromone system, and which expresses a  
PT heterologous surrogate of a yeast pheromone system, and a heterol  
ogous

PT peptide, useful in the discovery of antifungal compounds.

XX

PS Example 5; Page 35; 71pp; English.

XX

CC The present invention relates to engineered yeast cells expressin  
g a

CC heterologous surrogate of a yeast pheromone system, and a heterol  
ogous

CC peptide that is a potential modulator of the surrogate. The surro  
gate

CC performs a function naturally performed by the corresponding yeas  
t

CC pheromone system protein, under at least some conditions. Inhibit  
ion or

CC activation of the surrogate by the heterologous peptide affects a

CC selectable or screenable trait of the yeast cells. The yeast cell  
s are

CC useful for producing pheromone system protein surrogates. They ar  
e also

CC useful in the discovery of antifungal compounds, in describing th  
e use of

CC *Saccharomyces cerevisiae* mutant strains, which are made highly se  
nsitive

CC to a large range of antibiotics, and for the rapid detection of

CC antifungals. The present sequence represents an alpha-factor anal

us-10-030-735-53.rag

ogue

CC peptide from a random peptide library

XX

SQ Sequence 11 AA;

Query Match 100.0%; Score 20; DB 6; Length 11;

Best Local Similarity 100.0%; Pred. No. 90;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 4 QVRF 7

#### RESULT 12

AAB35379

ID AAB35379 standard; peptide; 12 AA.

XX

AC AAB35379;

XX

DT 08-MAY-2001 (first entry)

XX

DE Alpha3beta1 integrin binding peptide #44.

XX

KW Alpha3beta1 integrin; angiogenesis; cell proliferation; cancer;

KW diabetic retinopathy; restenosis; atherosclerosis; rheumatoid arthritis;

KW macular degeneration; psoriasis; cell adhesion; cell motility.

XX

OS Synthetic.

XX

PN WO200105812-A2.

XX

PD 25-JAN-2001.

XX

PF 12-JUL-2000; 2000WO-US018986.

XX

PR 15-JUL-1999; 99US-0144549P.

XX

PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.

XX

PI Roberts DD, Krutzsch HC;

XX

DR WPI; 2001-182656/18.

XX

PT New peptides that bind to or are recognized by alpha3-beta1 integrins,

us-10-030-735-53.rag

PT useful for inhibiting cell adhesion to extracellular matrix, cell  
PT motility and proliferation and for treating rheumatoid arthritis  
and  
PT cancer.  
XX  
PS Claim 4; Page 34; 84pp; English.  
XX  
CC The present invention provides a number of peptides which bind to  
CC alpha3beta1 integrins. They are useful in the modulation of cell  
adhesion  
CC and motility, and in the treatment of cancer, diabetic retinopath  
y,  
CC rheumatoid arthritis, macular degeneration, atherosclerosis, psor  
iasis  
CC and restenosis. The present sequence is an example of one of the  
peptides  
CC of the invention  
XX  
SQ Sequence 12 AA;

Query Match 100.0%; Score 20; DB 4; Length 12;  
Best Local Similarity 100.0%; Pred. No. 98;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; G  
aps 0;

Qy 1 QVRF 4  
|||  
Db 7 QVRF 10

RESULT 13

AAU96875

ID AAU96875 standard; peptide; 12 AA.

XX

AC AAU96875;

XX

DT 27-AUG-2002 (first entry)

XX

DE Human protein phosphatase 1 derived peptide #3.

XX

KW Human; protein phosphatase 1; PP1; target chemical compound;  
KW peptide binding.

XX

OS Homo sapiens.

XX

PN JP2002058479-A.

XX  
PD 26-FEB-2002.  
XX  
PF 14-AUG-2000; 2000JP-00245677.  
XX  
PR 14-AUG-2000; 2000JP-00245677.  
XX  
PA (CANO ) CANON KK.  
XX  
DR WPI; 2002-447068/48.  
XX  
PT Determination and isolation of a structure recognizing amino acid  
PT sequence that is capable of recognition of a target chemical substance.  
XX  
PS Example 1; Page 8; 18pp; Japanese.  
XX  
CC The invention relates to the determination of a structure recognizing  
CC amino acid sequence useful as a peptide capable of recognition and  
CC selective binding with a target chemical compound in a living sample,  
CC comprising: (1) screening of a peptide fraction solely adsorbed on a  
CC carrier for the screening using 1st screening carrier with immobilised  
CC target chemical substance from variable random amino acid sequence region  
CC ; (2) screening of the peptide fraction, excluding peptide fraction  
CC adsorbed on 2nd screening carrier from those selectively immobilised  
CC other than the target chemical substance in the sample, from the peptide  
CC groups adsorbed on the 1st screening step; (3) determination of the  
CC screened amino acid sequence in the 2nd step capable of binding with the  
CC target chemicals isolated in the 2nd step; and (4) determination of the  
CC aimed amino acid sequence capable of structure recognition in the  
CC elucidated peptides prepared by the preceding steps. The method is used  
CC for selective screening of a peptide capable of binding with the target

Blank Sheet (USPTO)

us-10-030-735-53.rag

CC chemical substance. The present sequence is a human protein phosphatase 1

CC (PP1) derived peptide used in an experiment demonstrating the method of

CC the invention

XX

SQ Sequence 12 AA;

Query Match 100.0%; Score 20; DB 5; Length 12;  
Best Local Similarity 100.0%; Pred. No. 98;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 5 QVRF 8

#### RESULT 14

ABP76487

ID ABP76487 standard; peptide; 12 AA.

XX

AC ABP76487;

XX

DT 24-FEB-2003 (first entry)

XX

DE Peptidomimetic antimicrobial peptide related peptide SEQ ID NO:119.

XX

KW Template-fixed peptidomimetic; antimicrobial; beta-hairpin; cytostatic;

KW antibacterial; infection; cystic fibrosis; lung infection; malignant;

KW cancer; disinfectant; preservative.

XX

OS Synthetic.

XX

PN WO200270547-A1.

XX

PD 12-SEP-2002.

XX

PF 18-FEB-2002; 2002WO-EP001711.

XX

PR 23-FEB-2001; 2001WO-EP002072.

XX

PA (POLY-) POLYPHOR LTD.

PA (UYZU-) UNIV ZUERICH.

XX



PI Obrecht D, Robinson JA, Vrijbloed JW;

XX

DR WPI; 2003-103173/09.

XX

PT New beta-hairpin peptidomimetic compounds, useful for treating  
PT infections, especially cystic fibrosis lung infections and cancer  
, and as

PT disinfectants/preservatives for e.g. foodstuffs or cosmetics.

XX

PS Example; Page 161; 262pp; English.

XX

CC The present invention describes template-fixed beta-hairpin  
CC peptidomimetic compounds (I) and (II). Also described: (1) prepar  
ation of

CC (I) and (II); and (2) a modification of the preparation in which  
CC enantiomers or all chiral starting materials are used. (I) and (I  
I) have

CC antibacterial and cytostatic activities. The peptidomimetic compo  
unds are

CC useful for treating or preventing infections or diseases related  
to such

CC infections, especially cystic fibrosis lung infections; for prepa  
ring

CC medicaments useful against malignant cells for treatment of cance  
r; as

CC disinfectants or preservatives for foodstuffs, cosmetics, medicam  
ents and

CC other nutrient-containing materials; and for preventing microbial

CC colonisation of surfaces. ABP76369 to ABP76677 represent peptide  
CC sequences used in the exemplification of the present invention

XX

SQ Sequence 12 AA;

Query Match 100.0%; Score 20; DB 6; Length 12;

Best Local Similarity 100.0%; Pred. No. 98;

Matches 4; Conservative 0; Mismatches 0; Indels 0; G  
aps 0;

Qy 1 QVRF 4

||||

Db 1 QVRF 4

RESULT 15

ABG72342

ID ABG72342 standard; peptide; 15 AA.

XX

AC ABG72342;  
XX  
DT 03-FEB-2003 (first entry)  
XX  
DE Human prostatic specific membrane antibody protein 8.91, N-termin  
us.  
XX  
KW Human; prostatic specific membrane antibody protein 8.91;  
KW prostatic cancer; benign prostatic tumour; tumour; haemopathy; HI  
V;  
KW human immunodeficiency virus infection; immunological disease;  
KW inflammation.  
XX  
OS Homo sapiens.  
XX  
PN CN1352126-A.  
XX  
PD 05-JUN-2002.  
XX  
PF 06-NOV-2000; 2000CN-00127262.  
XX  
PR 06-NOV-2000; 2000CN-00127262.  
XX  
PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.  
XX  
PI Mao Y, Xie Y;  
XX  
DR WPI; 2002-637134/69.  
XX  
PT New human prostatic specific membrane antibody protein 8.91 polyp  
eptide  
PT for treating e.g. prostatic cancer, benign prostatic tumor, hemop  
athy,  
PT human immunodeficiency virus infection, immunological diseases, an  
d  
PT inflammations.  
XX  
PS Example 5; Page 19 (disclosure); 34pp; Chinese.  
XX  
CC The present invention discloses a new kind of polypeptide, human  
CC prostatic specific membrane antibody protein 8.91, polynucleotide  
s  
CC encoding the polypeptide and producing the protein by recombinant  
DNA  
CC technology. The present invention also discloses applying the pol  
ypeptide  
CC in treating various diseases, such as prostatic cancer, benign pr  
ostatic

us-10-030-735-53.rag

CC tumour, other tumours, haemopathy, human immunodeficiency virus (HIV)

CC infection, immunological diseases, inflammations. The present invention

CC also discloses the antagonist resisting the polypeptide and its treatment

CC effect. The present invention also discloses application of the polynucleotides encoding human prostatic specific membrane antibody

CC protein 8.91. The present sequence represents human prostatic specific

CC membrane antibody protein 8.91, N-terminus, used in an ELISA (enzyme-

CC linked immunosorbent assay) experiment

XX

SQ Sequence 15 AA;

Query Match 100.0%; Score 20; DB 5; Length 15;

Best Local Similarity 100.0%; Pred. No. 1.3e+02;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 9 QVRF 12

RESULT 16

AAM17702

ID AAM17702 standard; protein; 33 AA.

XX

AC AAM17702;

XX

DT 12-OCT-2001 (first entry)

XX

DE Peptide #4136 encoded by probe for measuring cervical gene expression.

XX

KW Probe; human; microarray; gene expression; cervical epithelial cells;

KW cervical cancer.

XX

OS Homo sapiens.

XX

PN WO200157278-A2.

XX

PD 09-AUG-2001.

XX

us-10-030-735-53.rag

PF 30-JAN-2001; 2001WO-US000670.  
XX  
PR 04-FEB-2000; 2000US-0180312P.  
PR 26-MAY-2000; 2000US-0207456P.  
PR 30-JUN-2000; 2000US-00608408.  
PR 03-AUG-2000; 2000US-00632366.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
XX  
PA (MOLE-) MOLECULAR DYNAMICS INC.  
XX  
PI Penn SG, Hanzel DK, Chen W, Rank DR;  
XX  
DR WPI; 2001-488901/53.  
XX  
PT Human genome-derived single exon nucleic acid probes useful for a  
nalyzing  
PT gene expression in human cervical epithelial cells.  
XX  
PS Claim 27; SEQ ID NO 22528; 487pp; English.  
XX  
CC The present invention relates to human single exon nucleic acid p  
robes  
CC (SENP: see AAI10068-AAI28459). The present sequence is a peptide  
encoded  
CC by one such probe. The SENPs are derived from human HeLa cells. T  
he SENPs  
CC can be used to produce a single exon microarray, which can be use  
d for  
CC measuring human gene expression in a sample derived from human ce  
rvical  
CC epithelial cells. By measuring gene expression, the probes are th  
erefore  
CC useful in grading and/or staging of diseases of the cervix, notab  
ly  
CC cervical cancer. Note: The sequence data for this patent did not  
form  
CC part of the printed specification, but was obtained in electronic  
format  
CC directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 33 AA;

Query Match 100.0%; Score 20; DB 4; Length 33;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; G  
aps 0;

Qy            1 QVRF 4  
              | | | |  
Db            24 QVRF 27

RESULT 17

ABB36725

ID    ABB36725 standard; peptide; 33 AA.

XX

AC    ABB36725;

XX

DT    04-FEB-2002    (first entry)

XX

DE    Peptide #4231 encoded by human foetal liver single exon probe.

XX

KW    Human; foetal liver; gene expression; single exon nucleic acid pr  
obe.

XX

OS    Homo sapiens.

XX

PN    WO200157277-A2.

XX

PD    09-AUG-2001.

XX

PF    30-JAN-2001; 2001WO-US000669.

XX

PR    04-FEB-2000; 2000US-0180312P.

PR    26-MAY-2000; 2000US-0207456P.

PR    30-JUN-2000; 2000US-00608408.

PR    03-AUG-2000; 2000US-00632366.

PR    21-SEP-2000; 2000US-0234687P.

PR    27-SEP-2000; 2000US-0236359P.

PR    04-OCT-2000; 2000GB-00024263.

XX

PA    (MOLE-) MOLECULAR DYNAMICS INC.

XX

PI    Penn SG,    Hanzel DK,    Chen W,    Rank DR;

XX

DR    WPI; 2001-483447/52.

XX

PT    Human genome-derived single exon nucleic acid probes useful for a  
nalyzing

PT    gene expression in human fetal liver.

XX

PS    Claim 27; SEQ ID NO 29360; 639pp + Sequence Listing; English.

XX

CC    The invention relates to a single exon nucleic acid probe for mea

suring

CC human gene expression in a sample derived from human foetal liver  
. The

CC single exon nucleic acid probes may be used for predicting, measu  
ring and

CC displaying gene expression in samples derived from human fetal li  
ver. The

CC present sequence is a peptide encoded by a single exon nucleic ac  
id probe

CC of the invention. Note: The sequence data for this patent did not  
form

CC part of the printed specification, but was obtained in electronic  
format

CC directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX

SQ Sequence 33 AA;

Query Match 100.0%; Score 20; DB 4; Length 33;

Best Local Similarity 100.0%; Pred. No. 2.9e+02;

Matches 4; Conservative 0; Mismatches 0; Indels 0; G  
aps 0;

Qy 1 QVRF 4

||||

Db 24 QVRF 27

RESULT 18

AAM30216

ID AAM30216 standard; protein; 33 AA.

XX

AC AAM30216;

XX

DT 17-OCT-2001 (first entry)

XX

DE Peptide #4253 encoded by probe for measuring placental gene expre  
ssion.

XX

KW Probe; microarray; human; placenta; antenatal diagnosis;

KW genetic disorder.

XX

OS Homo sapiens.

XX

PN WO200157272-A2.

XX

PD 09-AUG-2001.

XX

PF 30-JAN-2001; 2001WO-US000663.

us-10-030-735-53.rag

XX  
PR 04-FEB-2000; 2000US-0180312P.  
PR 26-MAY-2000; 2000US-0207456P.  
PR 30-JUN-2000; 2000US-00608408.  
PR 03-AUG-2000; 2000US-00632366.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
XX  
PA (MOLE-) MOLECULAR DYNAMICS INC.  
XX  
PI Penn SG, Hanzel DK, Chen W, Rank DR;  
XX  
DR WPI; 2001-488897/53.  
XX  
PT Human genome-derived single exon nucleic acid probes useful for a  
nalyzing  
PT gene expression in human placenta.  
XX  
PS Claim 27; SEQ ID NO 30485; 654pp; English.  
XX  
CC The present invention relates to single exon nucleic acid probes  
(SENP:  
CC see AAI31315-AAI57546). The present sequence is a peptide encoded  
by one  
CC such probe. The probes are useful for producing a microarray for  
CC predicting, measuring and displaying gene expression in samples d  
erived  
CC from human placenta. The probes are useful for antenatal diagnosi  
s of  
CC human genetic disorders  
XX  
SQ Sequence 33 AA;

Query Match 100.0%; Score 20; DB 4; Length 33;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; G  
aps 0;

Qy 1 QVRF 4  
| | | |  
Db 24 QVRF 27

RESULT 19  
ABB31514  
ID ABB31514 standard; peptide; 33 AA.  
XX

AC ABB31514;  
 XX  
 DT 01-FEB-2002 (first entry)  
 XX  
 DE Peptide #4165 encoded by breast cell single exon nucleic acid probe.  
 XX  
 KW Human; microarray; single exon probe; gene expression; breast; disease;  
 KW cancer.  
 XX  
 OS Homo sapiens.  
 XX  
 PN WO200157271-A2.  
 XX  
 PD 09-AUG-2001.  
 XX  
 PF 30-JAN-2001; 2001WO-US000662.  
 XX  
 PR 04-FEB-2000; 2000US-0180312P.  
 PR 26-MAY-2000; 2000US-0207456P.  
 PR 30-JUN-2000; 2000US-00608408.  
 PR 03-AUG-2000; 2000US-00632366.  
 PR 21-SEP-2000; 2000US-0234687P.  
 PR 27-SEP-2000; 2000US-0236359P.  
 PR 04-OCT-2000; 2000GB-00024263.  
 XX  
 PA (MOLE-) MOLECULAR DYNAMICS INC.  
 XX  
 PI Penn SG, Hanzel DK, Chen W, Rank DR;  
 XX  
 DR WPI; 2001-496933/54.  
 XX  
 PT New spatially-addressable set of single exon nucleic acid probes, useful  
 PT for measuring gene expression in sample derived from human breast  
 PT comprises number of single exon nucleic acid probes.  
 XX  
 PS Claim 27; SEQ ID NO 14482; 327pp + Sequence Listing; English.  
 XX  
 CC The invention relates to a spatially-addressable set of single exon  
 CC nucleic acid probes for measuring gene expression in a sample derived  
 CC from human breast and BT 474 cells. The method involves contacting the  
 CC probes with a collection of detectably labelled nucleic acids derived



ived

CC from mRNA of human breast, and then measuring the label bound to each

CC probe of the microarray. The probes are useful for verifying the  
CC expression of regions of genomic DNA predicted to encode proteins  
. They

CC are useful for gene discovery, and for determining predisposition  
and/or

CC prognosing breast disease. Gene expression analysis is useful for

CC assessing the toxicity of chemical agents on cells. The microarra  
y of

CC this invention presents a far greater diversity of probes for mea  
suring

CC gene expression, with far less bias than expressed sequence tag

CC microarrays. The method is suitable for rapid production of funct  
ional

CC information from genomic sequence. The present sequence is a pept  
ide

CC encoded by a single exon nucleic acid probe of the invention. Not  
e: The

CC sequence data for this patent did not form part of the printed

CC specification, but was obtained in electronic format directly fro  
m WIPO

CC at ftp.wipo.int/pub/published\_pct\_sequences

XX

SQ Sequence 33 AA;

Query Match 100.0%; Score 20; DB 4; Length 33;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; G  
aps 0;

Qy 1 QVRF 4  
| | | |  
Db 24 QVRF 27

RESULT 20

AAM05364

ID AAM05364 standard; protein; 33 AA.

XX

AC AAM05364;

XX

DT 09-OCT-2001 (first entry)

XX

DE Peptide #4046 encoded by probe for measuring breast gene expressi  
on.

XX  
KW Probe; human; breast disease; breast cancer; development disorder  
;  
KW inflammatory disease; proliferative breast disease; non-carcinoma  
tumour.  
XX  
OS Homo sapiens.  
XX  
PN WO200157270-A2.  
XX  
PD 09-AUG-2001.  
XX  
PF 29-JAN-2001; 2001WO-US000661.  
XX  
PR 04-FEB-2000; 2000US-0180312P.  
PR 26-MAY-2000; 2000US-0207456P.  
PR 30-JUN-2000; 2000US-00608408.  
PR 03-AUG-2000; 2000US-00632366.  
PR 21-SEP-2000; 2000US-0234687P.  
PR 27-SEP-2000; 2000US-0236359P.  
PR 04-OCT-2000; 2000GB-00024263.  
XX  
PA (MOLE-) MOLECULAR DYNAMICS INC.  
XX  
PI Penn SG, Hanzel DK, Chen W, Rank DR;  
XX  
DR WPI; 2001-476286/51.  
XX  
PT Novel single exon nucleic acid probe used to measuring gene expre  
ssion in  
PT a human breast.  
XX  
PS Claim 27; SEQ ID NO 14104; 322pp; English.  
XX  
CC The present invention relates to novel single exon nucleic acid p  
robes  
CC (see AAI00010-AAI10067). The present sequence is a peptide encode  
d by one  
CC such probe. The probes are useful for measuring human gene expres  
sion in  
CC a human breast sample, where the probe hybridises at high stringe  
ncy to a  
CC nucleic acid expressed in the human breast. The probes are useful  
for  
CC predicting, diagnosing, grading, staging, monitoring and prognosi  
ng  
CC diseases of the human breast, particularly those diseases with po  
lygenic

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CC aetiology. The diseases include: breast cancer, disorders of development,  
CC inflammatory diseases of the breast, fibrocystic changes, proliferative  
CC breast disease and non-carcinoma tumours. Note: The sequence data for  
CC this patent did not form part of the printed specification, but was  
CC obtained in electronic format directly from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 33 AA;

Query Match 100.0%; Score 20; DB 4; Length 33;  
Best Local Similarity 100.0%; Pred. No. 2.9e+02;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4  
    ||||  
Db 24 QVRF 27

RESULT 21

AAY42735

ID AAY42735 standard; peptide; 36 AA.

XX

AC AAY42735;

XX

DT 20-DEC-1999 (first entry)

XX

DE Human alpha-1-antitrypsin C-terminal peptide 3.

XX

KW Alpha-1-antitrypsin; fragment; cholesterol; cleavage;

KW low density lipoprotein; LDL; LDL receptor; hypercholesterolaemia

;

KW atherosclerosis; gallstone.

XX

OS Synthetic.

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT Modified-site 1

FT /note= "Optionally N-terminally acetylated, tosylated,

FT myristoylated, benzoylated or carbobenzoxyated"

XX

PN WO9945940-A1.

XX  
PD 16-SEP-1999.  
XX  
PF 10-MAR-1999; 99WO-US005139.  
XX  
PR 12-MAR-1998; 98US-00038935.  
XX  
PA (UYVI-) UNIV VIRGINIA COMMONWEALTH.  
XX  
PI Wright HT, Janciauskiene S;  
XX  
DR WPI; 1999-590819/50.  
XX  
PT Lowering cholesterol levels in a patient using hypocholesterolemi  
c  
PT peptide.  
XX  
PS Disclosure; Page 5; 28pp; English.  
XX  
CC This sequence represents human alpha-1-antitrypsin C-terminal pept  
ide  
CC fragment 3. Alpha-1-antitrypsin is a known inhibitor of serine pr  
oteases,  
CC but loses its inhibitory activity due to a change in tertiary str  
ucture  
CC when cleaved by proteases such as leukocyte elastase. The cleaved  
alpha-1  
CC -antitrypsin molecules are cleared from the circulation through r  
eceptors  
CC in the liver and is accompanied by a depletion of extracellular  
CC cholesterol. The cause of this cholesterol depletion is due to an  
  
CC increase in the number of low density lipoprotein (LDL) receptors  
in  
CC liver cells which take up the LDL cholesterol complex. This inven  
tion  
CC takes advantage of the fact that there is an increase in LDL rece  
ptor  
CC levels induced by the presence of cleaved alpha-1-antitrypsin and  
it  
CC derivatives, including C-terminal peptide fragments. The C-termin  
al  
CC peptide fragments (AAY42733-Y42749) can be used to reduce the lev  
els of  
CC LDL cholesterol in a patient and can be used to treat a wide vari  
ety of  
CC disorders, including atherosclerosis, hypercholesterolaemia and  
CC gallstones. As the peptides are derived from a naturally occurrin

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g human

CC serum protein, they should not produce immune side effects

XX

SQ Sequence 36 AA;

Query Match 100.0%; Score 20; DB 2; Length 36;

Best Local Similarity 100.0%; Pred. No. 3.2e+02;

Matches 4; Conservative 0; Mismatches 0; Indels 0; G

aps 0;

Qy 1 QVRF 4

||||

Db 3 QVRF 6

RESULT 22

ABP80500

ID ABP80500 standard; protein; 44 AA.

XX

AC ABP80500;

XX

DT 07-MAR-2003 (first entry)

XX

DE N. gonorrhoeae amino acid sequence SEQ ID 7530.

XX

KW Antibacterial; infection; vaccine; gene therapy.

XX

OS Neisseria gonorrhoeae.

XX

PN WO200279243-A2.

XX

PD 10-OCT-2002.

XX

PF 12-FEB-2002; 2002WO-IB002069.

XX

PR 12-FEB-2001; 2001GB-00003424.

XX

PA (CHIR-) CHIRON SPA.

XX

PI Fontana MR, Pizza M, Massignani V, Monaci E;

XX

DR WPI; 2003-058415/05.

DR N-PSDB; ABZ41470.

XX

PT New protein from Neisseria gonorrhoeae, useful for the manufacture  
of a

PT medicament for treating or preventing N. gonorrhoeae infection.

XX

PS Disclosure; Page 737; 815pp; English.

XX

CC The present invention relates to proteins from *Neisseria gonorrhoeae*.

CC Also disclosed are the nucleic acid molecules encoding the proteins and

CC antibodies that specifically bind to the proteins. The composition

CC comprising the protein, nucleic acid or antibody is useful for the

CC manufacture of a medicament for treating or preventing *N. gonorrhoeae*

CC infection, this may be in the form of a vaccine or gene therapy.

CC Sequences given in records ABP76736-ABP81046 represent nucleic acid

CC molecules of the invention

XX

SQ Sequence 44 AA;

Query Match 100.0%; Score 20; DB 6; Length 44;

Best Local Similarity 100.0%; Pred. No. 4e+02;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 31 QVRF 34

# RESULT 23

ABP77440

ID ABP77440 standard; protein; 44 AA.

XX

AC ABP77440;

XX

DT 07-MAR-2003 (first entry)

XX

DE *N. gonorrhoeae* amino acid sequence SEQ ID 1410.

XX

KW Antibacterial; infection; vaccine; gene therapy.

XX

OS *Neisseria gonorrhoeae*.

XX

PN WO200279243-A2.

XX

PD 10-OCT-2002.

XX

PF 12-FEB-2002; 2002WO-IB002069.

XX  
 PR 12-FEB-2001; 2001GB-00003424.  
 XX  
 PA (CHIR-) CHIRON SPA.  
 XX  
 PI Fontana MR, Pizza M, Massignani V, Monaci E;  
 XX  
 DR WPI; 2003-058415/05.  
 DR N-PSDB; ABZ38410.  
 XX  
 PT New protein from Neisseria gonorrhoeae, useful for the manufacture  
 of a  
 PT medicament for treating or preventing N. gonorrhoeae infection.  
 XX  
 PS Disclosure; Page 290; 815pp; English.  
 XX  
 CC The present invention relates to proteins from Neisseria gonorrhoeae.  
 CC Also disclosed are the nucleic acid molecules encoding the proteins and  
 CC antibodies that specifically bind to the proteins. The composition  
 CC comprising the protein, nucleic acid or antibody is useful for the  
 CC manufacture of a medicament for treating or preventing N. gonorrhoeae  
 CC infection, this may be in the form of a vaccine or gene therapy.  
 CC Sequences given in records ABP76736-ABP81046 represent nucleic acid  
 CC molecules of the invention  
 XX  
 SQ Sequence 44 AA;

Query Match 100.0%; Score 20; DB 6; Length 44;  
 Best Local Similarity 100.0%; Pred. No. 4e+02;  
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4  
 ||||  
 Db 31 QVRF 34

## RESULT 24

AAB28082

ID AAB28082 standard; protein; 48 AA.

XX

AC AAB28082;

XX  
DT 02-FEB-2001 (first entry)  
XX  
DE Human secreted protein BLAST search protein SEQ ID NO: 130.  
XX  
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;  
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antitumor;  
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;  
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;  
KW neurological disease; infection; human; secreted protein.  
XX  
OS Homo sapiens.  
XX  
PN WO200055177-A2.  
XX  
PD 21-SEP-2000.  
XX  
PF 09-MAR-2000; 2000WO-US006058.  
XX  
PR 12-MAR-1999; 99US-0124145P.  
PR 03-DEC-1999; 99US-0168654P.  
XX  
PA (HUMA-) HUMAN GENOME SCI INC.  
XX  
PI Rosen CA, Ruben SM, Komatsoulis G;  
XX  
DR WPI; 2000-638177/61.  
XX  
PT Novel nucleic acids encoding 49 human secreted proteins useful for  
PT treating cancers, hyperproliferative disorders, inflammatory disorders,  
PT neurological disorders and cardiovascular disorders.  
XX  
PS Disclosure; Page 376; 389pp; English.  
XX  
CC The invention relates to the isolation of genes AAC29108-C59156 encoding  
CC the human secreted proteins AAB28012-B28060. This sequence represents a  
CC fragment of the protein encoded by the gene given in the descriptor line.  
CC The sequence is used as a query sequence for doing BLASTX searches to



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CC determine homologous sequence to the protein. The genes and proteins are  
CC useful for preventing, ameliorating or treating medical conditions, e.g.  
CC by protein or gene therapy. The genes are isolated from a range of human  
CC tissues disclosed in the specification. The nucleic acids, proteins,  
CC antibodies and (ant)agonists are useful in the diagnosis, treatment and  
CC prevention of: (a) cancer, e.g. breast and ovarian cancer, and other  
CC cancers of the adrenal gland, bone, bone marrow, breast, gastrointestinal  
CC tract, liver, lung, or urogenital; (b) immune disorders e.g. Addison's  
CC disease, allergies, autoimmune haemolytic anaemia, autoimmune  
CC thyroiditis, diabetes mellitus, Crohn's disease, multiple sclerosis,  
CC rheumatoid arthritis and ulcerative colitis; (c) cardiovascular disorders  
CC such as myocardial ischaemias; (d) wound healing; (e) neurological  
CC diseases e.g. cerebral anoxia and epilepsy; and (f) infectious diseases  
CC such as viral, bacterial, fungal and parasitic infections  
XX  
SQ Sequence 48 AA;

Query Match 100.0%; Score 20; DB 3; Length 48;  
Best Local Similarity 100.0%; Pred. No. 4.4e+02;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4  
    ||||  
Db 8 QVRF 11

RESULT 25  
ABG21213  
ID ABG21213 standard; protein; 50 AA.  
XX  
AC ABG21213;  
XX  
DT 18-FEB-2002 (first entry)  
XX  
DE Novel human diagnostic protein #21204.

XX  
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;  
KW food supplement; medical imaging; diagnostic; genetic disorder.  
XX  
OS Homo sapiens.  
XX  
PN WO200175067-A2.  
XX  
PD 11-OCT-2001.  
XX  
PF 30-MAR-2001; 2001WO-US008631.  
XX  
PR 31-MAR-2000; 2000US-00540217.  
PR 23-AUG-2000; 2000US-00649167.  
XX  
PA (HYSE-) HYSEQ INC.  
XX  
PI Drmanac RT, Liu C, Tang YT;  
XX  
DR WPI; 2001-639362/73.  
DR N-PSDB; AAS85400.  
XX  
PT New isolated polynucleotide and encoded polypeptides, useful in  
PT diagnostics, forensics, gene mapping, identification of mutations  
  
PT responsible for genetic disorders or other traits and to assess  
PT biodiversity.  
XX  
PS Claim 20; SEQ ID NO 51572; 103pp; English.  
XX  
CC The invention relates to isolated polynucleotide (I) and polypept  
ide (II)  
CC sequences. (I) is useful as hybridisation probes, polymerase chai  
n  
CC reaction (PCR) primers, oligomers, and for chromosome and gene ma  
pping,  
CC and in recombinant production of (II). The polynucleotides are al  
so used  
CC in diagnostics as expressed sequence tags for identifying express  
ed  
CC genes. (I) is useful in gene therapy techniques to restore normal  
  
CC activity of (II) or to treat disease states involving (II). (II)  
is  
CC useful for generating antibodies against it, detecting or quantit  
ating a  
CC polypeptide in tissue, as molecular weight markers and as a food  
CC supplement. (II) and its binding partners are useful in medical i

maging

CC of sites expressing (II). (I) and (II) are useful for treating disorders

CC involving aberrant protein expression or biological activity. The

CC polypeptide and polynucleotide sequences have applications in  
CC diagnostics, forensics, gene mapping, identification of mutations

CC responsible for genetic disorders or other traits to assess biodiversity

CC and to produce other types of data and products dependent on DNA and

CC amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic

CC amino acid sequences of the invention. Note: The sequence data for this

CC patent did not appear in the printed specification, but was obtained in

CC electronic format directly from WIPO at

CC ftp.wipo.int/pub/published\_pct\_sequences

XX

SQ Sequence 50 AA;

Query Match 100.0%; Score 20; DB 4; Length 50;

Best Local Similarity 100.0%; Pred. No. 4.6e+02;

Matches 4; Conservative 0; Mismatches 0; Indels 0; G

aps 0;

Qy 1 QVRF 4

||||

Db 21 QVRF 24

# RESULT 26

ABM65035

ID ABM65035 standard; protein; 50 AA.

XX

AC ABM65035;

XX

DT 20-OCT-2003 (first entry)

XX

DE Propionibacterium acnes immunogenic polypeptide #29711.

XX

KW Acne vulgaris; antiseborrheic; dermatological; antibacterial;

KW immunostimulant; immune response; vaccine; immunogenic.

XX

OS Propionibacterium acnes.

XX

PN WO2003033515-A1.  
XX  
PD 24-APR-2003.  
XX  
PF 11-OCT-2002; 2002WO-US032727.  
XX  
PR 15-OCT-2001; 2001US-00978825.  
XX  
PA (CORI-) CORIXA CORP.  
XX  
PI Mitcham JL, Skeiky YAW, Persing DH, Bhatia A, Maisonneuve JL;  
PI Zhang Y, Wang S, Jen S, Lodes MJ, Benson DR, Jones R, Carte  
r D;  
PI Barth B, Vallieve-Douglass J;  
XX  
DR WPI; 2003-381789/36.  
XX  
PT New Propionibacterium acnes polypeptides and polynucleotides enco  
ding the  
PT polypeptide, useful for diagnosing, preventing or treating acne v  
ulgaris,  
PT or for stimulating an immune response specific for a P. acnes pro  
tein.  
XX  
PS Claim 7; SEQ ID NO 29711; 1481pp; English.  
XX  
CC The invention relates to an isolated polynucleotide (ACF64435-ACF  
64733)  
CC encoding a Propionibacterium acnes protein. The invention also re  
lates to  
CC polypeptides encoded by the polynucleotides (ABM35624-ABM64536) a  
nd to  
CC immunogenic fragments of P. acnes polypeptides. The invention  
CC additionally encompasses expression vectors and host cells compri  
sing a  
CC polynucleotide of the invention; antibodies against polypeptides  
of the  
CC invention; fusion proteins comprising a polypeptide of the invent  
ion; a  
CC method for stimulating an immune response specific for a P. acnes  
  
CC polypeptide and an isolated T cell population comprising T cells  
prepared  
CC via this method; a vaccine composition (comprising P. acnes polyp  
eptides,  
CC polynucleotides, antibodies, fusion proteins, T cell populations,  
or  
CC antigen-presenting cells that express the polypeptide); a method

and kit

CC for detecting or determining the presence or absence of P. acnes  
in a  
CC patient; and a method for inhibiting the development of P. acnes  
in a  
CC patient. The P. acnes polypeptides, polynucleotides, antibodies,  
fusion  
CC proteins, T cell populations or antigen-presenting cells that exp  
ress the  
CC polypeptides are useful for diagnosing, preventing or treating ac  
ne  
CC vulgaris, or for stimulating an immune response specific for a P.  
acnes  
CC protein. The polynucleotides can also be used as probes or primer  
s for  
CC nucleic acid hybridisation. The vaccine composition is useful for  
the  
CC stimulation of an immune response against P. acnes, or for treati  
ng acne,  
CC and the kit is useful for performing a diagnostic assay. The pres  
ent  
CC sequence represents a specifically claimed P. acnes polypeptide w  
hich is  
CC thought to contain an immunogenic region. Note: The sequence data  
for  
CC this patent did not form part of the printed specification, but w  
as  
CC obtained in electronic format directly from WIPO at  
CC ftp.wipo.int/pub/published\_pct\_sequences  
XX  
SQ Sequence 50 AA;

Query Match 100.0%; Score 20; DB 6; Length 50;  
Best Local Similarity 100.0%; Pred. No. 4.6e+02;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; G  
aps 0;

Qy 1 QVRF 4  
| | | |  
Db 7 QVRF 10

RESULT 27

AAU66685

ID AAU66685 standard; protein; 53 AA.

XX

AC AAU66685;

XX

DT 13-FEB-2002 (first entry)  
XX  
DE Propionibacterium acnes immunogenic protein #27581.  
XX  
KW SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis;  
KW uveitis; endophthalmitis; bone; joint; central nervous system; ELISA;  
KW inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;  
KW dermatological; osteopathic; neuroprotectant.  
XX  
OS Propionibacterium acnes.  
XX  
PN WO200181581-A2.  
XX  
PD 01-NOV-2001.  
XX  
PF 20-APR-2001; 2001WO-US012865.  
XX  
PR 21-APR-2000; 2000US-0199047P.  
PR 02-JUN-2000; 2000US-0208841P.  
PR 07-JUL-2000; 2000US-0216747P.  
XX  
PA (CORI-) CORIXA CORP.  
XX  
PI Skeiky YAW, Persing DH, Mitcham JL, Wang SS, Bhatia A;  
PI L'maisonneuve J, Zhang Y, Jen S, Carter D;  
XX  
DR WPI; 2001-616774/71.  
DR N-PSDB; AAS59748.  
XX  
PT Propionibacterium acnes polypeptides and nucleic acids useful for  
PT vaccinating against and diagnosing infections, especially useful  
for  
PT treating acne vulgaris.  
XX  
PS Example 1; SEQ ID NO 27880; 1069pp; English.  
XX  
CC Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic  
CC polypeptides. The proteins and their associated DNA sequences are  
used in  
CC the treatment, prevention and diagnosis of medical conditions caused by  
CC P. acnes. The disorders include SAPHO syndrome (synovitis, acne, pustulosis, hypertosis and osteomyelitis), uveitis and endophthal

mitis.

CC P. acnes is also involved in infections of bone, joints and the central

CC nervous system, however it is particularly involved in the inflammatory

CC lesions associated with acne vulgaris. A method for detecting the

CC presence or absence of P. acnes in a patient comprises contacting a

CC sample with a binding agent that binds to the proteins of the invention

CC and determining the amount of bound protein in the sample. The

CC polypeptides may be used as antigens in the production of antibodies

CC specific for P. acnes proteins. These antibodies can be used to

CC downregulate expression and activity of P. acnes polypeptides and

CC therefore treat P. acnes infections. The antibodies may also be used as

CC diagnostic agents for determining P. acnes presence, for example, by

CC enzyme linked immunosorbent assay (ELISA). Note: The sequence data for

CC this patent did not form part of the printed specification, but was

CC obtained in electronic format directly from WIPO at

CC ftp.wipo.int/pub/published\_pct\_sequences

XX

SQ Sequence 53 AA;

Query Match 100.0%; Score 20; DB 4; Length 53;

Best Local Similarity 100.0%; Pred. No. 4.9e+02;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 27 QVRF 30

RESULT 28

AAU47836

ID AAU47836 standard; protein; 53 AA.

XX

AC AAU47836;

XX

DT 27-FEB-2002 (first entry)

XX

DE Propionibacterium acnes immunogenic protein #8732.  
XX  
KW SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis;  
KW uveitis; endophthalmitis; bone; joint; central nervous system; ELISA;  
KW inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;  
KW dermatological; osteopathic; neuroprotectant.  
XX  
OS Propionibacterium acnes.  
XX  
PN WO200181581-A2.  
XX  
PD 01-NOV-2001.  
XX  
PF 20-APR-2001; 2001WO-US012865.  
XX  
PR 21-APR-2000; 2000US-0199047P.  
PR 02-JUN-2000; 2000US-0208841P.  
PR 07-JUL-2000; 2000US-0216747P.  
XX  
PA (CORI-) CORIXA CORP.  
XX  
PI Skeiky YAW, Persing DH, Mitcham JL, Wang SS, Bhatia A;  
PI L'maisonneuve J, Zhang Y, Jen S, Carter D;  
XX  
DR WPI; 2001-616774/71.  
DR N-PSDB; AAS59540.  
XX  
PT Propionibacterium acnes polypeptides and nucleic acids useful for  
  
PT vaccinating against and diagnosing infections, especially useful  
for  
PT treating acne vulgaris.  
XX  
PS Example 1; SEQ ID NO 9031; 1069pp; English.  
XX  
CC Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic  
CC polypeptides. The proteins and their associated DNA sequences are  
used in  
CC the treatment, prevention and diagnosis of medical conditions caused by  
CC P. acnes. The disorders include SAPHO syndrome (synovitis, acne,  
CC pustulosis, hypertosis and osteomyelitis), uveitis and endophthalmitis.  
CC P. acnes is also involved in infections of bone, joints and the c



entral

CC nervous system, however it is particularly involved in the inflammatory

CC lesions associated with acne vulgaris. A method for detecting the

CC presence or absence of *P. acnes* in a patient comprises contacting a

CC sample with a binding agent that binds to the proteins of the invention

CC and determining the amount of bound protein in the sample. The

CC polypeptides may be used as antigens in the production of antibodies

CC specific for *P. acnes* proteins. These antibodies can be used to

CC downregulate expression and activity of *P. acnes* polypeptides and

CC therefore treat *P. acnes* infections. The antibodies may also be used as

CC diagnostic agents for determining *P. acnes* presence, for example, by

CC enzyme linked immunosorbent assay (ELISA). Note: The sequence data for

CC this patent did not form part of the printed specification, but was

CC obtained in electronic format directly from WIPO at

CC ftp.wipo.int/pub/published\_pct\_sequences

XX

SQ Sequence 53 AA;

Query Match 100.0%; Score 20; DB 4; Length 53;

Best Local Similarity 100.0%; Pred. No. 4.9e+02;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 27 QVRF 30

RESULT 29

ABM44355

ID ABM44355 standard; protein; 53 AA.

XX

AC ABM44355; .

XX

DT 20-OCT-2003 (first entry)

XX

DE Propionibacterium acnes predicted ORF-encoded polypeptide #9031.

XX

us-10-030-735-53.rag

KW Acne vulgaris; antiseborrhoeic; dermatological; antibacterial;  
KW immunostimulant; immune response; vaccine.  
XX  
OS Propionibacterium acnes.  
XX  
PN WO2003033515-A1.  
XX  
PD 24-APR-2003.  
XX  
PF 11-OCT-2002; 2002WO-US032727.  
XX  
PR 15-OCT-2001; 2001US-00978825.  
XX  
PA (CORI-) CORIXA CORP.  
XX  
PI Mitcham JL, Skeiky YAW, Persing DH, Bhatia A, Maisonneuve JL;  
PI Zhang Y, Wang S, Jen S, Lodes MJ, Benson DR, Jones R, Carte  
r D;  
PI Barth B, Vallieve-Douglass J;  
XX  
DR WPI; 2003-381789/36.  
DR N-PSDB; ACF64469.  
XX  
PT New Propionibacterium acnes polypeptides and polynucleotides enco  
ding the  
PT polypeptide, useful for diagnosing, preventing or treating acne v  
ulgaris,  
PT or for stimulating an immune response specific for a P. acnes pro  
tein.  
XX  
PS Example 1; SEQ ID NO 9031; 1481pp; English.  
XX  
CC The invention relates to an isolated polynucleotide (ACF64435-ACF  
64733)  
CC encoding a Propionibacterium acnes protein. The invention also re  
lates to  
CC polypeptides encoded by the polynucleotides (ABM35624-ABM64536) a  
nd to  
CC immunogenic fragments of P. acnes polypeptides. The invention  
CC additionally encompasses expression vectors and host cells compri  
sing a  
CC polynucleotide of the invention; antibodies against polypeptides  
of the  
CC invention; fusion proteins comprising a polypeptide of the invent  
ion; a  
CC method for stimulating an immune response specific for a P. acnes  
CC polypeptide and an isolated T cell population comprising T cells

prepared

CC via this method; a vaccine composition (comprising P. acnes polypeptides,

CC polynucleotides, antibodies, fusion proteins, T cell populations, or

CC antigen-presenting cells that express the polypeptide); a method and kit

CC for detecting or determining the presence or absence of P. acnes in a

CC patient; and a method for inhibiting the development of P. acnes in a

CC patient. The P. acnes polypeptides, polynucleotides, antibodies, fusion

CC proteins, T cell populations or antigen-presenting cells that express the

CC polypeptides are useful for diagnosing, preventing or treating acne

CC vulgaris, or for stimulating an immune response specific for a P. acnes

CC protein. The polynucleotides can also be used as probes or primers for

CC nucleic acid hybridisation. The vaccine composition is useful for the

CC stimulation of an immune response against P. acnes, or for treating acne,

CC and the kit is useful for performing a diagnostic assay. The present

CC sequence represents a polypeptide predicted to be encoded by an ORF (open

CC reading frame) contained within the P. acnes polynucleotides of the

CC invention. Note: The sequence data for this patent did not form part of

CC the printed specification, but was obtained in electronic format directly

CC from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX

SQ Sequence 53 AA;

Query Match 100.0%; Score 20; DB 6; Length 53;

Best Local Similarity 100.0%; Pred. No. 4.9e+02;

Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 QVRF 4

||||

Db 27 QVRF 30

RESULT 30

ABM63204

ID ABM63204 standard; protein; 53 AA.

XX

AC ABM63204;

XX

DT 20-OCT-2003 (first entry)

XX

DE Propionibacterium acnes predicted ORF-encoded polypeptide #27880.

XX

KW Acne vulgaris; antiseborrheic; dermatological; antibacterial;  
KW immunostimulant; immune response; vaccine.

XX

OS Propionibacterium acnes.

XX

PN WO2003033515-A1.

XX

PD 24-APR-2003.

XX

PF 11-OCT-2002; 2002WO-US032727.

XX

PR 15-OCT-2001; 2001US-00978825.

XX

PA (CORI-) CORIXA CORP.

XX

PI Mitcham JL, Skeiky YAW, Persing DH, Bhatia A, Maisonneuve JL;  
PI Zhang Y, Wang S, Jen S, Lodes MJ, Benson DR, Jones R, Carte  
r D;

PI Barth B, Vallieve-Douglass J;

XX

DR WPI; 2003-381789/36.

DR N-PSDB; ACF64677.

XX

PT New Propionibacterium acnes polypeptides and polynucleotides encoding the

PT polypeptide, useful for diagnosing, preventing or treating acne vulgaris,

PT or for stimulating an immune response specific for a P. acnes protein.

XX

PS Example 1; SEQ ID NO 27880; 1481pp; English.

XX

CC The invention relates to an isolated polynucleotide (ACF64435-ACF64733)

CC encoding a Propionibacterium acnes protein. The invention also relates to

CC polypeptides encoded by the polynucleotides (ABM35624-ABM64536) a

nd to

CC immunogenic fragments of *P. acnes* polypeptides. The invention  
CC additionally encompasses expression vectors and host cells compri  
sing a

CC polynucleotide of the invention; antibodies against polypeptides  
of the

CC invention; fusion proteins comprising a polypeptide of the invent  
ion; a

CC method for stimulating an immune response specific for a *P. acnes*

CC polypeptide and an isolated T cell population comprising T cells  
prepared

CC via this method; a vaccine composition (comprising *P. acnes* polyp  
eptides,

CC polynucleotides, antibodies, fusion proteins, T cell populations,  
or

CC antigen-presenting cells that express the polypeptide); a method  
and kit

CC for detecting or determining the presence or absence of *P. acnes*  
in a

CC patient; and a method for inhibiting the development of *P. acnes*  
in a

CC patient. The *P. acnes* polypeptides, polynucleotides, antibodies,  
fusion

CC proteins, T cell populations or antigen-presenting cells that exp  
ress the

CC polypeptides are useful for diagnosing, preventing or treating ac  
ne

CC vulgaris, or for stimulating an immune response specific for a *P.*  
*acnes*

CC protein. The polynucleotides can also be used as probes or primer  
s for

CC nucleic acid hybridisation. The vaccine composition is useful for  
the

CC stimulation of an immune response against *P. acnes*, or for treati  
ng acne,

CC and the kit is useful for performing a diagnostic assay. The pres  
ent

CC sequence represents a polypeptide predicted to be encoded by an O  
RF (open

CC reading frame) contained within the *P. acnes* polynucleotides of t  
he

CC invention. Note: The sequence data for this patent did not form p  
art of

CC the printed specification, but was obtained in electronic format  
directly

CC from WIPO at ftp.wipo.int/pub/published\_pct\_sequences

XX

us-10-030-735-53.rag

SQ Sequence 53 AA;

Query Match 100.0%; Score 20; DB 6; Length 53;  
Best Local Similarity 100.0%; Pred. No. 4.9e+02;  
Matches 4; Conservative 0; Mismatches 0; Indels 0; G  
aps 0;

Qy 1 QVRF 4  
| | | |  
Db 27 QVRF 30

RESULT 31

AAB23638

ID AAB23638 standard; protein; 54 AA.

XX

AC AAB23638;

XX

DT 12-JAN-2001 (first entry)

XX

DE Human secreted protein SEQ ID NO: 94.

XX

KW Human secreted protein; cytokine; cell proliferation;

KW nutritional supplement; immune modulation; autoimmune disorder;

KW haematopoiesis regulation; tissue growth; haemostasis; inflammati

on.

XX

OS Homo sapiens.

XX

PN WO200049134-A1.

XX

PD 24-AUG-2000.

XX

PF 18-FEB-2000; 2000WO-US004340.

XX

PR 19-FEB-1999; 99US-0120680P.

PR 23-APR-1999; 99US-00298733.

PR 17-AUG-1999; 99US-0149639P.

PR 23-SEP-1999; 99US-0155686P.

PR 01-OCT-1999; 99US-0157247P.

PR 29-NOV-1999; 99US-0167822P.

PR 29-NOV-1999; 99US-0167823P.

PR 15-FEB-2000; 2000US-0182711P.

XX

PA (ALPH-) ALPHAGENE INC.

XX

PI Valenzuela D, Yuan O, Hoffman H, Hall J, Rapiejko P;

XX